Keynote Address,
"Index Trading and Speculation in Commodity Futures Markets" at the 2011 InVivo Paris
Conference on Speculation in Agriculture Markets.
"Energy Markets and Dodd-Frank: Where are we now?" at the 2012 Fulbright Jaworski/Cornerstone Research conference on Dodd-Frank's Impact on the
Energy Markets.
"Financial Trading, Energy Markets and Dodd-Frank" at the 2012 Oklahoma State MSQFE Alumni Weekend.

Panelist,
"Current Events in Commodity Markets" panel at the CME Group 2nd Annual Global Commodity Investment Roundtable, New York 2013.
"Financial Trading, Derivative Markets and Commodities" presentation on "Interaction between Physical and Financial Commodity Markets—A Role for Regulators" panel at the Luxembourg IOSCO Member Meetings, Luxembourg 2013.
"Commodity Market Regulation: Achieving Transparency while Maintaining Liquidity" panel at the Global Grain Conference, Chicago 2013.
"Dodd-Frank and Commodity Markets" panel at the Terrapinn World Commodities Week, London 2011.
" Oil Prices--Rising Prices, Speculation and Regulation " panel at the Standard Chartered Bank Hong Kong Earth Resource Conference, 2011.
"The Regulatory World of Market Manipulation" panel at the American Bar Association Antitrust and Consumer Law Issues in the Energy Industry Conference, Houston
2011.
"Commodity Super-cycles" panel at Standard Chartered Bank New York Symposium, New York 2011.
"Assessing Dodd-Frank" panel on current financial regulation, National Association of Business Economists, Washington, DC 2010.
"What's Next?" panel on post-crisis regulation, Georgetown University, 2010.
"Sovereign CDS Markets" discussion panel at Georgetown University, 2010
"IPOs and the JOBS Act" panel at the U.S. Securities and Exchange Commission,.

Publications

"Speculation, Prices and Market Volatility" with Celso Brunetti and Bahattin Büyükşahin, *Journal of Financial and Quantitative Analysis*, forthcoming.

"The Sound of Silence" with Mohsen Saad, 2014, *The Financial Review* 49, 203-230.

"Informed Trading and Market Structure" with Charlie X. Cai, Robert S. Hudson and Kevin Keasey, *European Financial Management*, forthcoming.

"Herding and Speculation in the Crude Oil Market" with Celso Brunetti and Bahattin Büyükşahin, 2013, *The Energy Journal* 34, 83-97.

"Who Drove and Burst the Tech Bubble?" with John M. Griffin, Tao Shu and Selim Topaloglu, 2011, *Journal of Finance* 66, 1251-1290.

"Clearing House, Margin Requirements, and Systemic Risk" with Jorge A. Cruz Lopez and Christophe Pérignon, 2011, *Review of Futures Markets* 19, 39-54.

"The Role of Speculators during Periods of Financial Distress" with Naomi Boyd and Arkadiusz Nowak, 2011, *Journal of Alternative Investments* 14, 10-25.

"Effects of Central Bank Intervention on the Interbank Market during the Subprime Crisis" with Celso Brunetti and Mario di Filippo, 2011, *Review of Financial Studies* 24, 2053-2083.

"The Role of Speculators in the Crude Oil Futures Markets" with Bahattin Büyükşahin, 2011, *The Energy Journal* 32, 167-202.

"Why to Maturing Futures and Cash Prices Diverge for Agricultural Commodities?" with Nicole Aulerich and Raymond P.H. Fishe, 2011, *Journal of Futures Markets* 31, 503-533.

"Why are IPO Investors Net Buyers through Lead Underwriters?" with John M. Griffin and Selim Topaloglu, 2007, *Journal of Financial Economics* 85, 518-551.

"How New Entry in Options Markets affected Market Making and Trading Costs" with Patrick DeFontnouvelle and Raymond P.H. Fishe, 2005, *Journal of Investment Management* 3, 24-40.

"The Development of Secondary Market Liquidity for NYSE-Listed IPOs" with Shane A. Corwin and Marc L. Lipson, 2004, *Journal of Finance* 59, 2339-2374, Awarded Outstanding Paper in Financial Institutions at the 2002 Southern Finance Association Meeting.

"The Dynamics of Institutional and Individual Trading" with John M. Griffin and Selim Topaloglu, 2003, *Journal of Finance* 58, 2285-2320. Nominated for the Smith-Breeden Prize.

"The Behavior of Bid-Ask Spreads and Volume in Options Markets During the Competition for Listings in 1999" with Patrick de Fontnouvelle and Raymond P.H. Fishe, 2003, *Journal of Finance* 58, 2437-2463. Nominated for the Smith-Breeden Prize.

"Nasdaq Trading Halts: The Impact of Market Mechanisms on Prices, Trading Activity and Execution Costs" with William G. Christie and Shane A. Corwin, 2002, *Journal of Finance* 57, 1443-1478.

"The Initial Listing Decisions of Firms that Go Public" with Shane A. Corwin, 2001, *Financial Management* 30, 35-55.

"The Effect of Nasdaq Market Reform on Trading Costs and Depths" with Michael J. Barclay, William G. Christie, Eugene Kandel, and Paul H. Schultz, 1999, *Journal of Finance* 54, 1-34. Nominated for the Smith-Breeden Prize.

"The Trading Profits of SOES Bandits" with Paul H. Schultz, 1998, *Journal of Financial Economics* 50, 39-62.

"The Importance of Firm Quotes and Rapid Executions: Evidence from the January 1994 SOES Rules Change" with Paul H. Schultz, 1997, *Journal of Financial Economics* 45, 135-166.

"Why Did NASDAQ Market Makers Stop Avoiding Odd-Eighth Quotes?" with Paul H. Schultz and William G. Christie, 1994, *Journal of Finance* 49, 1841-1860.

Book Chapters/Articles in Books

"The Changing Structure of Energy Futures Markets" with Bahattin Büyükşahin, Michael S. Haigh, James A. Overdahl and Michel A. Robe, 2009, in *Finance et Valeurs*, A. Corhay, G. Hubner and A. Miller, editors, ULg Press, Belgium.

"Equity Market Derivatives" with L. Mick Swartz, 2009, in *Financial Derivatives* (Robert W. Kolb Series in Finance), Bob Kolb and Jim Overdahl, editors, John Wiley and Sons, Inc.

"Tick Size, Market Structure and Trading Costs" with William G. Christie and Eugene Kandel, 2008, in *Stock Market Liquidity: Implications for Market Microstructure and Asset Pricing*, Francois-Serge L'habitant and Greg N. Gregoriou, editors, John Wiley and Sons, Inc., 173-197.

Working Papers

"Interconnectedness in the Interbank Market" (formerly titled "The Breakdown of the Interbank Market during the Financial Crisis") with Celso Brunetti, Shawn Mankad, and George Michailidis.

"CoMargin" with Jorge A. Cruz Lopez, Christophe Hurlin and Christophe Perignon.

"Funding Constraints and Liquidity Contagion in U.S. Equity and Treasury Markets" with Christof W. Stahel.

"The Impact of Herding on Futures Market Prices" with Naomi Boyd, Bahattin Büyükşahin and Michael S. Haigh.

"Fundamentals, Trader Activity and Derivative Pricing" with Bahattin Büyükşahin, Michael S. Haigh, James A. Overdahl and Michel A. Robe.

"Do Institutional Traders Predict Bull and Bear Markets?" with Celso Brunetti and Bahattin Büyükşahin.

"Trading Networks" with Lada Adamic, Celso Brunetti and Andrei Kirilenko.

"Off but Not Gone: A Study of Nasdaq Delistings" (formerly titled "From Pink Slips to Pink Sheets: Market Quality around Nasdaq Delisting") with Venkatesh Panchapagesan and Ingrid M. Werner.

"Stepping Ahead of the Book" with Amy K. Edwards.

"Liquidity Risk, Investor Flux and Post-Earnings Announcement Drift" with Kirsten L. Anderson and Eric So.

"Investor Behavior Surrounding Earnings Announcements" with Kirsten L. Anderson and Selim Topaloglu.

Work-In-Progress

"Price Discovery in Crude Oil Futures Markets" with Bahattin Büyükşahin.

"The Long and Short of Dealer Profits" with Jay F. Coughenour.

Teaching Experience

Seminar, Empirical Finance (PhD), 2012
Financial Management (MSF), 2013

Introductory Managerial Finance (MBA), 2013
Investment Analysis (MBA), 2001-04, 2006
Portfolio Theory (MBA), 2010, 2012
Derivative Investments (MBA), 1996-97, 2005, 2010, 2012-13
Management of Financial Institutions (MBA), 1995-97
Student Managed Investment Fund, 2013-14
Options, Futures and Other Derivatives, 1994-97, 2005, 2012-13
Investments, 2001-06, 2010
Speculative Markets, 2010
Introductory Managerial Finance, 1997-99
Financial Institutions Management, 1997

Presentations

"Interconnectedness in the Interbank Market" (formerly "The Breakdown of the Interbank Market during the Financial Crisis")
Presented at Babson College, Cornell University, George Mason University and the University of Hull.

"LME and Aluminum"
Presented to the Metals Service Center Institute.

"Funding Constraints and Liquidity Contagion in U.S. Equity and Treasury Markets"
Presented at Syracuse University.

"Do Institutional Traders Predict Bull and Bear Markets?"
Presented at the New York Accounting and Finance Symposium and Syracuse University.

"Speculation, Prices and Market Volatility"
Presented at the 2014 Canadian Economics Association. the University of Mississippi and the University of Delaware Economics Seminar.

"The Evolving Landscape for Derivative Regulation"
Presented at Fulbright Jaworski Oil and Gas Compliance Seminar, HEC Paris, NasdaqOMX, the Universita Politecnica delle Marche, Ancona, Italy, the Vanderbilt University Conference on Regulatory Change in the Global Financial System, at Cornerstone Research and the Platts Oil Trading and Risk Management Forum.

"Effects of Central Bank Intervention on the Interbank Market during the Sub-Prime Crisis"
Presented at the Universita Politecnica delle Marche, Ancona, Italy.

"Trading Networks"
Presented at American University, George Washington University, Rutgers University, Southern Methodist University, Syracuse University, Temple University, the University of Central Florida, the University of Missouri-Columbia, the University of Tennessee and Villanova University.

"Improving Market Transparency"
Presented at the 2009 CFTC Symposium for International Market Authorities.

"Abusive Conduct from an Economist's Perspective"
Presented at the 2009 CFTC Division of Enforcement International Regulators Conference.

"The Role of Speculators in the Crude Oil Futures Markets"
Presented at the NYSE/Euronext Amsterdam & Tinbergen Institute Workshop on Liquidity and Volatility in Today's Markets and the 2009 International Association of Energy Economists International Conference.

"Index Trading and Speculation in Commodity Futures Markets"
Presented at the CFTC Agricultural Forum, the American Agricultural Economics Association Meeting, the Mid-Atlantic Farm Credit Board of Directors annual meeting, the Council on Food, Agriculture and Resource Economics, the Washington Area Finance Association, the U.S.-India Financial and Economic Forum, the U.S. Department of State Bureau of Economic and Business Affairs, the 2008 CFTC Symposium for International Market Authorities, the USDA/World Bank Food Panel, the 2008 IOSCO Conference on Speculation and Volatility in Commodity Markets, the Canadian Securities Administration, the Energy Information Administration (Department of Energy), the 2009 NCCC-134 Meeting on Applied Commodity Price Analysis, Forecasting and Market Risk Management, the Kansas City Federal Reserve Panel on Agricultural Finance, the 2009 EIA Energy Conference, the American Petroleum Institute, the 2009 FIA Legal and Compliance Conference, HEC Paris, the 2009 Canadian Economics Association meeting and the 2011 InVivo Paris Conference on Speculation in Agriculture Markets.

"Increasing Internationalization of the Financial Markets"
Presented at the Chatham House, London

"Index Funds and Data Dissemination in Crude Oil Markets"
Presented at the 2008 International Energy Agency Expert Roundtable on Oil Price Formation and to the U. S. CFTC Energy Markets Advisory Committee.

"The Impact of Herding on Futures Market Prices"
Presented at the 2007 CFTC Symposium for International Market Authorities.

"Price Discovery in U.S. Natural Gas Futures Markets"
Presented to the U.S. CFTC.

"Market Growth, Trader Participation and Pricing in Energy Futures Markets"
Presented at the Arizona State University, the 2007 MIT Center for Energy and Environmental Policy Research Conference and Johns Hopkins University.

"Liquidity Risk, Investor Flux and Post-Earnings Announcement Drift"
Presented at the University of Toronto and the University of Arizona.

"The Sound of Silence"
Presented at the U.S. CFTC and University of Delaware Brown Bag seminar series.

"Off but Not Gone: A Study of Nasdaq Delistings" (formerly titled "From Pink Slips to Pink Sheets: Market Quality around Nasdaq Delisting")
Presented at the University of Delaware, George Mason University and George Washington University.

"Why are IPO Investors Net Buyers through Lead Underwriters?"
Presented at American University, Case Western Reserve University, Drexel University, the University of Missouri—Columbia, Morgan State University and Temple University.

"Investor Behavior Surrounding Earnings Announcements"
Presented at the University of Delaware Brown Bag seminar series.

"Trading Behavior around the Rise and Fall of Nasdaq"
Presented at the University of Maryland and the University of Connecticut.

"The Effect of Decimals on Nasdaq Retail Trading"
Presented at the University of Delaware and 2002 Eastern Finance Association Meeting.

"The Development of Secondary Market Liquidity for NYSE-Listed IPOs"
Presented at Nasdaq, 2001 Financial Management Association Annual Meeting, 2002 Southern Finance Association Meeting, the University of Miami and the University of Delaware.

"Competition for Market Making in NYSE IPOs"

Presented at Nasdaq.

"Nasdaq Trading Halts: The Impact of Market Mechanisms on Prices, Trading Activity and Execution"
Presented at the 2000 Western Finance Association Annual Meeting, 2000 NBER Microstructure Conference, 2000 Financial Management Association Annual Meeting, Penn State University, the Nasdaq Stock Market, George Washington University and American University.

"The Initial Listing Decisions of Firms that Go Public"
Presented at the 1998 Financial Management Association Annual Meeting, the Nasdaq Stock Market, Syracuse University and Arizona State University.

"The Trading Profits of SOES Bandits"
Presented at the University of Georgia and the 1997 Financial Management Association Annual Meeting.

"The Importance of Firm Quotes and Rapid Executions: Evidence from the January 1994 SOES Rules Change"
Presented at The Ohio State University, University of Notre Dame and the 1997 American Finance Association Annual Meeting.

"Cost Components of the Bid-Ask Spread: An Intraday Analysis"
Presented at the 1994 Financial Management Association Annual Meeting, University of Arizona, University of Houston, University of Iowa, University of Miami, Michigan State University and University of Notre Dame.

Referee,

> *Applied Economics, The Accounting Review, Eastern Economic Journal, Financial Management, Financial Review, International Review of Financial Analysis, Journal of Accounting and Public Policy, Journal of Banking and Finance, Journal of Business, Journal of Corporate Finance, The Journal of Economics and Business, Journal of Finance, Journal of Financial and Quantitative Analysis, Journal of Financial Economics, Journal of Financial Markets, Journal of Futures Markets, Journal of Money, Credit and Banking, The Quarterly Review of Economics and Finance* and *Review of Financial Studies.*

Director,

> Eris Exchange, 2011-Present
> Southern Finance Association, 2010-2013

Track Chair,

> Markets and Microstructure, Financial Management Association 2002

Markets and Microstructure, Midwest Financial Management Association 2003

Conference Organizer,
Sovereign Wealth Funds (American University), 2014
Program Committee,
European Finance Association 2006-11, 2014-15
Financial Management Association 2002-10
Financial Management Association—Asia 2013-15
Midwest Finance Association 2014
Southern Finance Association 2008
Western Finance Association 2003-11, 2013-15

Session Chair,
Financial Management Association 2002, 2004-05
Southern Finance Association 2000, 2002, 2008
Eastern Finance Association 2002

Discussant,
Allied Social Sciences Association 2007
Canadian Economics Association 2014
Finance Down Under 2013-15
Financial Management Association 1996-97, 1999-2002, 2004-06
Notre Dame/Nasdaq Dealer Market Conferences 1999-2000
Ohio State Conference on Dealer Markets 1996
Southern Finance Association 2000, 2002, 2008
Stanford Program on Energy and Sustainable Development, 2014
Western Finance Association 2001, 2004
Washington Area Finance Association 2000, 2002, 2004

Member,
American Finance Association
Financial Management Association
Southern Finance Association
Western Finance Association

Advisor,
Lerner Finance Club (MBA) 2005-07
Syracuse Financial Management Association 2011-13

Other Work Experience
Copy Editor, *Journal of Finance*, 1992-93

MBA Advisor/Graduate Admissions Coordinator, University of Iowa College of Business Administration, 1988-1991
Executive Trainee/Distributor, MAY Corporation Venture Stores Division, 1988

Honors and Awards

Lerner College Outstanding Scholar Award, University of Delaware, 2008
Research Grants,
- Institute for Financial Markets, 2010
- Lerner College of Business and Economics, 2004, 2007
- University of Delaware General University Research Grant, 2006
- University of Delaware Department of Finance, 2005
- University of Notre Dame Mendoza College of Business, 1996, 1998-99

Nominated for University of Delaware Lerner College Teaching Award, 2004, 2006
Nominated for University of Delaware Lerner College Advising Award, 2004
Cited as "Prominent Faculty" in 2008-10, 2012 Business Week Rankings of Undergraduate Business Schools
Member, Beta Gamma Sigma